

CLAIMS

What is claimed is:

1. A method for treating a mammalian subject having a carcinoid tumor, comprising administering to the subject an amount of a therapeutic virus effective to treat the condition, wherein the virus is a negative-stranded RNA virus.
2. The method of claim 1, wherein the virus is a replication-competent oncolytic virus.
3. The method of claim 2, wherein the oncolytic virus is a Paramyxovirus.
4. The method of claim 3, wherein the Paramyxovirus is a Newcastle Disease Virus.
5. The method of claim 4, wherein the virus is a mesogenic strain of Newcastle Disease Virus.
6. The method of claim 1, wherein the virus is administered systemically.
7. The method of claim 6, wherein the virus is administered intravenously.
8. The method of claim 7, wherein the virus administered is a mesogenic strain of Newcastle Disease Virus.
9. The method of claim 8, wherein the virus is administered over an administration time period of up to 24 hours; and the dose is administered at a rate of up to 7.0×10^8 PFU per square meter of patient surface area in any ten minute sampling time period within the administration time period.

10. The method of claim 9, wherein the rate is up to 2.0×10^8 PFU per square meter of patient surface area in any ten minute sampling time period within the administration time period.
11. The method of claim 9, wherein the administration time period is at least 1 hour.
12. The method of claim 11, wherein the administration time period is at least 3 hours.
13. The method of claim 8, wherein the therapeutic virus is administered to the subject in one or more cycles, wherein at least one cycle comprises administering sequentially one or more desensitization doses of the virus followed by administering one or more escalated doses of the virus, wherein the amount of the virus in each escalated dose is higher than the amount of virus in each desensitization dose.
14. The method of claim 13, wherein the cycle comprises one desensitization dose of from 1.2×10^{10} PFU to 4.8×10^{10} PFU per square meter of patient surface area, and one or more escalated doses of from 2.4×10^{10} PFU to 1.2×10^{11} PFU per square meter of patient surface area.
15. The method of claim 14, wherein the desensitization dose is about 2.4×10^{10} PFU per square meter of patient surface area, and the one or more escalated doses are about 4.8×10^{10} PFU per square meter of patient surface area.
16. The method of claim 1, wherein the subject is a human subject.
17. The method of claim 1, wherein the subject is a non-human mammal.
18. The method of claim 1, wherein the size of the tumor decreases after administration of the virus.

19. The method of claim 1, wherein the level of 5-hydroxyindole acetic acid in urine of the subject decreases after administration of the virus.
20. The method of claim 1, wherein the subject has carcinoid syndrome and one or more symptoms of carcinoid syndrome are decreased after administration of the virus.
21. The method of claim 20, wherein the one or more symptoms of carcinoid syndrome are selected from the group consisting of diarrhea, flushing, and fatigue.
22. The method of claim 20, wherein the symptom of carcinoid syndrome comprises one or both of diarrhea and flushing; before beginning the therapeutic virus treatment octreotide was administered to the patient to control the symptom; and the decrease in the symptom of carcinoid syndrome is measured by a decrease in the dose of octreotide needed to control the symptom.
23. The method of claim 22, wherein the symptom is controlled without octreotide.